

Technical Exhibit  
Minor Modification to WHRQ  
Sandusky, OH  
375W 102.4m HAAT  
80.8m AGL

TABLE OF CONTENTS

	Technical Statement
Figure 1	Interference Study Table
Figure 2	Interference Study Maps
Figure 3	International Borders
Figure 4	Community Coverage

#### Predicted Coverage Contours

The proposed HAAT and the predicted 60 dBu contours were calculated in accordance with Section 47 C.F.R. 73.313. The average terrain elevations were calculated along 72 radials using the NED 30m terrain database.

All contours displayed in exhibits are plotted every degree in accordance with the propagation prediction curves of Section 73.333.

#### Interference Compliance

Contour protection, as required by C.F.R. Section 73.509 to co-channel and first, second and third adjacent channels is demonstrated herein by Figures 1 and 2.

#### International Borders

The instant application is proposed as a limited assignment with respect to CIMX 204C1 in Windsor, ON and CBEE 201A in Chatham, ON. There is no outgoing or incoming interference. See Figures 3 to 3-2.

#### RF Electromagnetic Exposure Analysis

Using a worst case assumption of maximum downward radiation ( $F=1.0$ ) the RF exposure at 2 m above ground level is  $4.1238 \mu\text{W}/\text{sq cm}$  or 0.4% of the controlled standard. This is insignificant when added to the existing RF on the tower.

The tower is fenced with RF warning signs. The power will be reduced or shut off to allow necessary access to the tower.

CH# 201A - 88.1 MHz, Pwr= 0.375 kW, HAAT= 102.4 M, COR= 300.8 M  
Average Protected F(50-50)= 14.39 km  
Omni-directional

DISPLAY DATES  
DATA 03-15-11  
SEARCH 03-17-11

Terrain database is NED 30 Meter , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
In & Out distances between contours are shown at closest points. Reference zone = 1, Co to 3rd adjacent.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.  
^ = Station meets FCC minimum distance spacing for its class.  
< = Power and antenna height 'Max classed' as per Sec 73.215 protection requirements

Figure 2  
Minor Amendment to Application for WHRQ

FMCommander Single Allocation Study - 03-17-2011 - NED 30 Meter  
WHRQ's Overlaps (In= 0.45 km, Out= 3.35 km)

WHRQ CH 201 A  
Lat= 41 22 37.8, Lng= 82 48 52.3  
0.375 kW 102.4 M HAAT, 300.8 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

WDTR-A CH 201 A DA BPED20090302AAN  
Lat= 41 57 26.0, Lng= 83 15 30.0  
0.8 kW 137 M HAAT, 311 M COR  
Prot.= 60 dBu, Intef.= 40 dBu

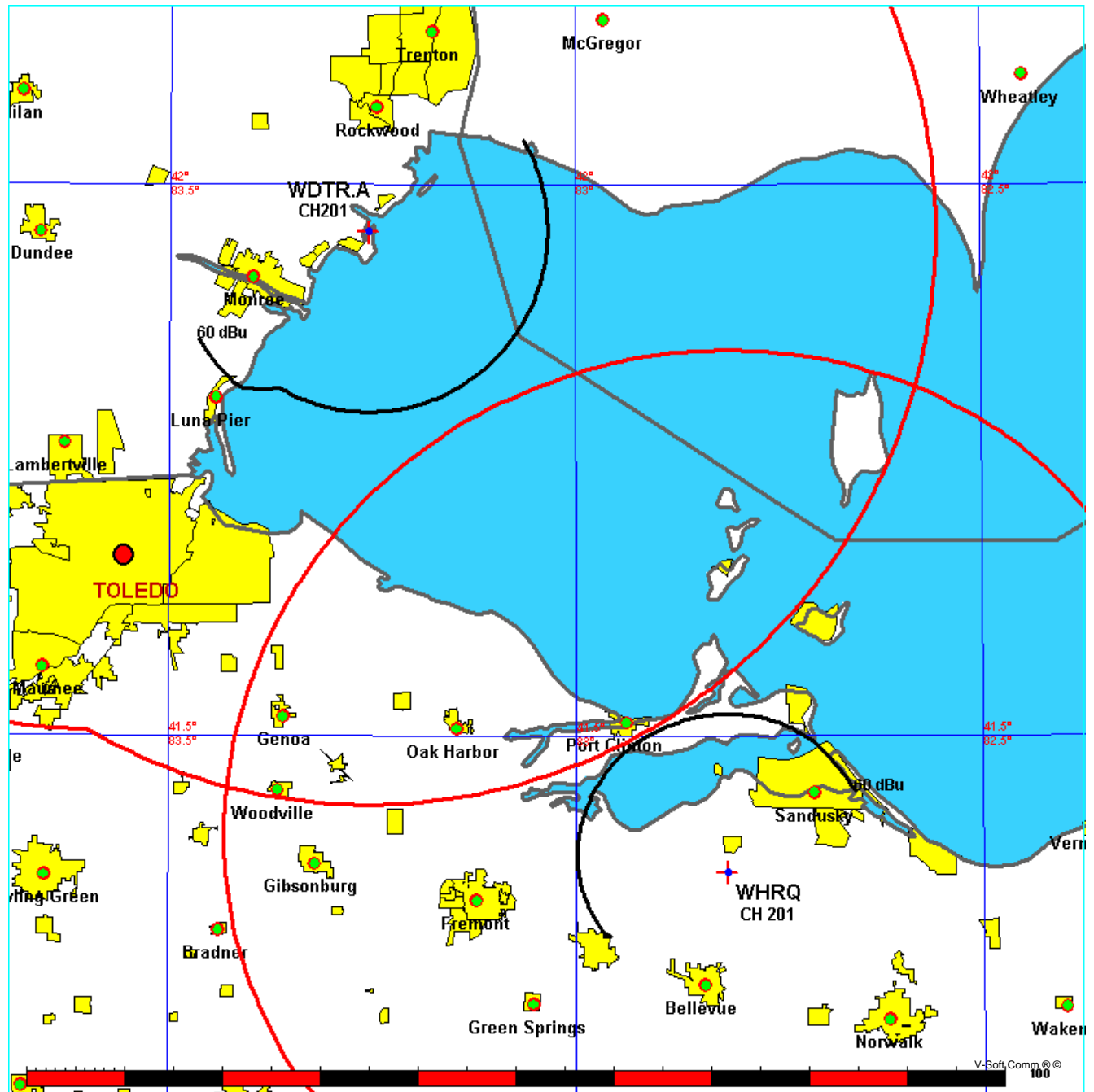


Figure 2-1

03-17-2011

Terrain Data

FMOver Analysis

WHRQ

Channel = 201A

Max ERP = 0.375 kW

RCAMSL = 300.8 M

N. Lat. 41 22 37.8

W. Lng. 82 48 52.3

Protected

60 dBu

WDTR-A BPED20090302AAN

Channel = 201A

Max ERP = 0.8 kW

RCAMSL = 311 M

N. Lat. 41 57 26.0

W. Lng. 83 15 30.0

Interfering

40 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
270.0	000.3750	0114.3	015.3	161.4	000.5005	0137.0	068.0	36.55	
271.0	000.3750	0114.7	015.3	161.3	000.5005	0137.0	067.7	36.63	
272.0	000.3750	0115.2	015.3	161.3	000.5005	0137.0	067.4	36.71	
273.0	000.3750	0115.6	015.4	161.2	000.5005	0137.0	067.2	36.80	
274.0	000.3750	0116.1	015.4	161.2	000.5005	0137.0	066.9	36.88	
275.0	000.3750	0116.4	015.4	161.1	000.5005	0137.0	066.7	36.97	
276.0	000.3750	0116.8	015.5	161.0	000.5005	0137.0	066.4	37.05	
277.0	000.3750	0117.3	015.5	160.9	000.5005	0137.0	066.2	37.13	
278.0	000.3750	0117.8	015.5	160.9	000.5005	0137.0	065.9	37.22	
279.0	000.3750	0118.1	015.6	160.8	000.5005	0137.0	065.6	37.30	
280.0	000.3750	0118.3	015.6	160.7	000.5005	0137.0	065.4	37.38	
281.0	000.3750	0118.5	015.6	160.6	000.5005	0137.0	065.2	37.46	
282.0	000.3750	0119.0	015.6	160.5	000.5005	0137.0	064.9	37.54	
283.0	000.3750	0119.2	015.6	160.4	000.5005	0137.0	064.7	37.62	
284.0	000.3750	0119.5	015.7	160.2	000.5005	0137.0	064.4	37.70	
285.0	000.3750	0119.9	015.7	160.1	000.5005	0137.0	064.2	37.78	
286.0	000.3750	0120.2	015.7	160.0	000.5005	0137.0	063.9	37.85	
287.0	000.3750	0120.3	015.7	159.9	000.5005	0137.0	063.7	37.93	
288.0	000.3750	0120.5	015.7	159.7	000.5005	0137.0	063.5	38.00	
289.0	000.3750	0120.6	015.7	159.6	000.5005	0137.0	063.3	38.08	
290.0	000.3750	0120.7	015.7	159.4	000.5005	0137.0	063.1	38.15	
291.0	000.3750	0120.8	015.7	159.3	000.5005	0137.0	062.9	38.22	
292.0	000.3750	0120.9	015.7	159.1	000.5005	0137.0	062.6	38.29	
293.0	000.3750	0121.1	015.8	158.9	000.5005	0137.0	062.4	38.36	
294.0	000.3750	0121.3	015.8	158.8	000.5005	0137.0	062.2	38.44	
295.0	000.3750	0121.6	015.8	158.6	000.5005	0137.0	062.0	38.51	
296.0	000.3750	0121.8	015.8	158.4	000.5005	0137.0	061.8	38.58	
297.0	000.3750	0122.0	015.8	158.2	000.5005	0137.0	061.6	38.65	
298.0	000.3750	0122.2	015.8	158.0	000.5005	0137.0	061.4	38.71	
299.0	000.3750	0122.3	015.8	157.8	000.5005	0137.0	061.3	38.78	
300.0	000.3750	0122.3	015.8	157.6	000.5005	0137.0	061.1	38.84	
301.0	000.3750	0122.3	015.8	157.4	000.5005	0137.0	060.9	38.90	
302.0	000.3750	0122.5	015.9	157.2	000.5005	0137.0	060.7	38.96	
303.0	000.3750	0122.6	015.9	157.0	000.5005	0137.0	060.6	39.02	
304.0	000.3750	0122.7	015.9	156.8	000.5005	0137.0	060.4	39.07	
305.0	000.3750	0122.8	015.9	156.6	000.5005	0137.0	060.3	39.13	
306.0	000.3750	0122.9	015.9	156.4	000.5005	0137.0	060.1	39.18	
307.0	000.3750	0123.0	015.9	156.1	000.5005	0137.0	060.0	39.23	
308.0	000.3750	0123.2	015.9	155.9	000.5005	0137.0	059.8	39.28	
309.0	000.3750	0123.3	015.9	155.7	000.5005	0137.0	059.7	39.33	
310.0	000.3750	0123.4	015.9	155.4	000.5005	0137.0	059.6	39.38	
311.0	000.3750	0123.4	015.9	155.2	000.5005	0137.0	059.5	39.42	
312.0	000.3750	0123.4	015.9	155.0	000.5005	0137.0	059.3	39.46	
313.0	000.3750	0123.5	015.9	154.7	000.5005	0137.0	059.2	39.50	
314.0	000.3750	0123.5	015.9	154.5	000.5005	0137.0	059.1	39.54	
315.0	000.3750	0123.5	015.9	154.2	000.5005	0137.0	059.0	39.58	
316.0	000.3750	0123.5	015.9	154.0	000.5005	0137.0	058.9	39.61	
317.0	000.3750	0123.6	015.9	153.7	000.5005	0137.0	058.9	39.64	
318.0	000.3750	0123.5	015.9	153.4	000.5005	0137.0	058.8	39.67	

Figure 2-1

319.0	000.3750	0123.5	015.9	153.2	000.5005	0137.0	058.7	39.69
320.0	000.3750	0123.5	015.9	152.9	000.5005	0137.0	058.6	39.72
321.0	000.3750	0123.6	015.9	152.6	000.5005	0137.0	058.6	39.74
322.0	000.3750	0123.6	015.9	152.4	000.5005	0137.0	058.5	39.76
323.0	000.3750	0123.6	015.9	152.1	000.5005	0137.0	058.5	39.78
324.0	000.3750	0123.6	015.9	151.8	000.5005	0137.0	058.4	39.79
325.0	000.3750	0123.6	015.9	151.6	000.5005	0137.0	058.4	39.81
326.0	000.3750	0123.6	015.9	151.3	000.5005	0137.0	058.4	39.82
327.0	000.3750	0123.6	015.9	151.0	000.5005	0137.0	058.4	39.83
328.0	000.3750	0123.5	015.9	150.8	000.5005	0137.0	058.3	39.83
329.0	000.3750	0123.5	015.9	150.5	000.5005	0137.0	058.3	39.83
330.0	000.3750	0123.4	015.9	150.2	000.5005	0137.0	058.3	39.83
331.0	000.3750	0123.2	015.9	149.9	000.5005	0137.0	058.4	39.83
332.0	000.3750	0123.1	015.9	149.7	000.5005	0137.0	058.4	39.82
333.0	000.3750	0122.9	015.9	149.4	000.5005	0137.0	058.4	39.81
334.0	000.3750	0122.7	015.9	149.1	000.5005	0137.0	058.4	39.80
335.0	000.3750	0122.6	015.9	148.8	000.5005	0137.0	058.5	39.79
336.0	000.3750	0122.5	015.9	148.6	000.5005	0137.0	058.5	39.77
337.0	000.3750	0122.5	015.9	148.3	000.5005	0137.0	058.5	39.76
338.0	000.3750	0122.4	015.9	148.0	000.5005	0137.0	058.6	39.74
339.0	000.3750	0122.2	015.8	147.8	000.5005	0137.0	058.7	39.72
340.0	000.3750	0122.0	015.8	147.5	000.5005	0137.0	058.7	39.69
341.0	000.3750	0122.0	015.8	147.3	000.5005	0137.0	058.8	39.67
342.0	000.3750	0122.2	015.8	147.0	000.5005	0137.0	058.8	39.65
343.0	000.3750	0122.5	015.9	146.7	000.5005	0137.0	058.9	39.63
344.0	000.3750	0122.6	015.9	146.5	000.5005	0137.0	059.0	39.60
345.0	000.3750	0122.6	015.9	146.2	000.5005	0137.0	059.1	39.57
346.0	000.3750	0122.8	015.9	146.0	000.5005	0137.0	059.1	39.54
347.0	000.3750	0122.8	015.9	145.7	000.5005	0137.0	059.2	39.50
348.0	000.3750	0122.8	015.9	145.5	000.5005	0137.0	059.3	39.47
349.0	000.3750	0122.8	015.9	145.2	000.5005	0137.0	059.4	39.43
350.0	000.3750	0122.7	015.9	145.0	000.5005	0137.0	059.6	39.38
351.0	000.3750	0122.5	015.9	144.7	000.5005	0137.0	059.7	39.33
352.0	000.3750	0122.6	015.9	144.5	000.5005	0137.0	059.8	39.29
353.0	000.3750	0122.3	015.8	144.3	000.5005	0137.0	060.0	39.24
354.0	000.3750	0122.3	015.8	144.0	000.5005	0137.0	060.1	39.19
355.0	000.3750	0122.2	015.8	143.8	000.5005	0137.0	060.2	39.14
356.0	000.3750	0122.2	015.8	143.6	000.5005	0137.0	060.4	39.08
357.0	000.3750	0122.2	015.8	143.4	000.5005	0137.0	060.5	39.03
358.0	000.3750	0122.1	015.8	143.2	000.5005	0137.0	060.7	38.97
359.0	000.3750	0122.2	015.8	142.9	000.5005	0137.0	060.9	38.92
000.0	000.3750	0122.4	015.9	142.7	000.5005	0137.0	061.0	38.86
001.0	000.3750	0122.3	015.8	142.5	000.5005	0137.0	061.2	38.80
002.0	000.3750	0122.2	015.8	142.3	000.5005	0137.0	061.4	38.74
003.0	000.3750	0122.3	015.8	142.1	000.5005	0137.0	061.5	38.68
004.0	000.3750	0122.3	015.8	141.9	000.5005	0137.0	061.7	38.61
005.0	000.3750	0122.2	015.8	141.7	000.5005	0137.0	061.9	38.55
006.0	000.3750	0122.2	015.8	141.6	000.5005	0137.0	062.1	38.48
007.0	000.3750	0122.2	015.8	141.4	000.5005	0137.0	062.3	38.41
008.0	000.3750	0122.3	015.8	141.2	000.5005	0137.0	062.5	38.35
009.0	000.3750	0122.4	015.9	141.0	000.5005	0137.0	062.7	38.28
010.0	000.3750	0122.4	015.9	140.8	000.5005	0137.0	062.9	38.21
011.0	000.3750	0122.5	015.9	140.7	000.5005	0137.0	063.1	38.13
012.0	000.3750	0122.6	015.9	140.5	000.5005	0137.0	063.3	38.06
013.0	000.3750	0122.6	015.9	140.4	000.5005	0137.0	063.5	37.99
014.0	000.3750	0122.3	015.8	140.2	000.5005	0137.0	063.8	37.91
015.0	000.3750	0121.7	015.8	140.1	000.5005	0137.0	064.0	37.83
016.0	000.3750	0121.5	015.8	140.0	000.5005	0137.0	064.3	37.75
017.0	000.3750	0121.8	015.8	139.8	000.5005	0137.0	064.5	37.68
018.0	000.3750	0122.3	015.8	139.7	000.5005	0137.0	064.7	37.61
019.0	000.3750	0122.5	015.9	139.5	000.5005	0137.0	064.9	37.53
020.0	000.3750	0122.5	015.9	139.4	000.5005	0137.0	065.2	37.46
021.0	000.3750	0122.4	015.9	139.3	000.5005	0137.0	065.4	37.38
022.0	000.3750	0122.3	015.9	139.2	000.5005	0137.0	065.7	37.30
023.0	000.3750	0122.3	015.8	139.1	000.5005	0137.0	065.9	37.21

				Figure 2-1				
024.0	000.3750	0122.1	015.8	139.0	000.5005	0137.0	066.2	37.13
025.0	000.3750	0121.8	015.8	138.9	000.5005	0137.0	066.4	37.05
026.0	000.3750	0121.2	015.8	138.8	000.5005	0137.0	066.7	36.96
027.0	000.3750	0121.1	015.8	138.7	000.5005	0137.0	066.9	36.88
028.0	000.3750	0121.6	015.8	138.6	000.5005	0137.0	067.2	36.80
029.0	000.3750	0121.3	015.8	138.6	000.5005	0137.0	067.5	36.71

03-17-2011 Terrain Data

WDTR-A BPED20090302AAN

Channel = 201A  
 Max ERP = 0.8 kW  
 RCAMSL = 311 M  
 N. Lat. 41 57 26.0  
 W. Lng. 83 15 30.0  
 Protected  
 60 dBu

WHRQ

Channel = 201A  
 Max ERP = 0.375 kW  
 RCAMSL = 300.8 M  
 N. Lat. 41 22 37.8  
 W. Lng. 82 48 52.3  
 Interfering  
 40 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
090.0	000.5005	0137.0	018.3	343.9	000.3750	0122.6	067.1	34.81	
091.0	000.5005	0137.0	018.3	343.9	000.3750	0122.6	066.8	34.91	
092.0	000.5005	0137.0	018.3	343.8	000.3750	0122.6	066.5	35.01	
093.0	000.5005	0137.0	018.3	343.7	000.3750	0122.6	066.2	35.10	
094.0	000.5005	0137.0	018.3	343.6	000.3750	0122.6	065.9	35.20	
095.0	000.5005	0137.0	018.3	343.5	000.3750	0122.6	065.6	35.29	
096.0	000.5005	0137.0	018.3	343.4	000.3750	0122.6	065.3	35.38	
097.0	000.5005	0137.0	018.3	343.3	000.3750	0122.6	065.0	35.48	
098.0	000.5005	0137.0	018.3	343.2	000.3750	0122.5	064.7	35.57	
099.0	000.5005	0137.0	018.3	343.0	000.3750	0122.5	064.4	35.66	
100.0	000.5005	0137.0	018.3	342.9	000.3750	0122.5	064.1	35.75	
101.0	000.5005	0137.0	018.3	342.8	000.3750	0122.5	063.8	35.84	
102.0	000.5005	0137.0	018.3	342.6	000.3750	0122.4	063.6	35.93	
103.0	000.5005	0137.0	018.3	342.5	000.3750	0122.4	063.3	36.02	
104.0	000.5005	0137.0	018.3	342.4	000.3750	0122.4	063.0	36.11	
105.0	000.5005	0137.0	018.3	342.2	000.3750	0122.3	062.7	36.20	
106.0	000.5005	0137.0	018.3	342.0	000.3750	0122.2	062.5	36.28	
107.0	000.5005	0137.0	018.3	341.9	000.3750	0122.1	062.2	36.37	
108.0	000.5005	0137.0	018.3	341.7	000.3750	0122.0	062.0	36.45	
109.0	000.5005	0137.0	018.3	341.5	000.3750	0122.0	061.7	36.54	
110.0	000.5005	0137.0	018.3	341.3	000.3750	0122.0	061.5	36.62	
111.0	000.5005	0137.0	018.3	341.1	000.3750	0122.0	061.2	36.71	
112.0	000.5005	0137.0	018.3	341.0	000.3750	0122.0	061.0	36.80	
113.0	000.5005	0137.0	018.3	340.8	000.3750	0122.0	060.7	36.88	
114.0	000.5005	0137.0	018.3	340.5	000.3750	0122.0	060.5	36.97	
115.0	000.5005	0137.0	018.3	340.3	000.3750	0122.0	060.3	37.05	
116.0	000.5005	0137.0	018.3	340.1	000.3750	0122.0	060.1	37.13	
117.0	000.5005	0137.0	018.3	339.9	000.3750	0122.0	059.8	37.21	
118.0	000.5005	0137.0	018.3	339.7	000.3750	0122.1	059.6	37.29	
119.0	000.5005	0137.0	018.3	339.4	000.3750	0122.1	059.4	37.37	
120.0	000.5005	0137.0	018.3	339.2	000.3750	0122.1	059.2	37.44	
121.0	000.5005	0137.0	018.3	339.0	000.3750	0122.2	059.0	37.52	
122.0	000.5005	0137.0	018.3	338.7	000.3750	0122.3	058.8	37.60	
123.0	000.5005	0137.0	018.3	338.5	000.3750	0122.3	058.6	37.67	
124.0	000.5005	0137.0	018.3	338.2	000.3750	0122.4	058.4	37.74	
125.0	000.5005	0137.0	018.3	338.0	000.3750	0122.5	058.3	37.81	
126.0	000.5005	0137.0	018.3	337.7	000.3750	0122.5	058.1	37.87	
127.0	000.5005	0137.0	018.3	337.4	000.3750	0122.6	057.9	37.94	
128.0	000.5005	0137.0	018.3	337.1	000.3750	0122.5	057.8	37.99	

				Figure 2-1			
129.0	000.5005	0137.0	018.3	336.9	000.3750	0122.5	057.6 38.05
130.0	000.5005	0137.0	018.3	336.6	000.3750	0122.5	057.5 38.10
131.0	000.5005	0137.0	018.3	336.3	000.3750	0122.5	057.3 38.15
132.0	000.5005	0137.0	018.3	336.0	000.3750	0122.5	057.2 38.20
133.0	000.5005	0137.0	018.3	335.7	000.3750	0122.5	057.1 38.25
134.0	000.5005	0137.0	018.3	335.4	000.3750	0122.6	057.0 38.30
135.0	000.5005	0137.0	018.3	335.1	000.3750	0122.6	056.9 38.34
136.0	000.5005	0137.0	018.3	334.8	000.3750	0122.6	056.8 38.39
137.0	000.5005	0137.0	018.3	334.5	000.3750	0122.6	056.7 38.42
138.0	000.5005	0137.0	018.3	334.2	000.3750	0122.6	056.6 38.46
139.0	000.5005	0137.0	018.3	333.9	000.3750	0122.7	056.5 38.49
140.0	000.5005	0137.0	018.3	333.6	000.3750	0122.7	056.4 38.52
141.0	000.5005	0137.0	018.3	333.3	000.3750	0122.8	056.3 38.56
142.0	000.5005	0137.0	018.3	333.0	000.3750	0123.0	056.3 38.59
143.0	000.5005	0137.0	018.3	332.6	000.3750	0123.1	056.2 38.62
144.0	000.5005	0137.0	018.3	332.3	000.3750	0123.1	056.2 38.64
145.0	000.5005	0137.0	018.3	332.0	000.3750	0123.1	056.1 38.65
146.0	000.5005	0137.0	018.3	331.7	000.3750	0123.1	056.1 38.67
147.0	000.5005	0137.0	018.3	331.3	000.3750	0123.2	056.1 38.68
148.0	000.5005	0137.0	018.3	331.0	000.3750	0123.2	056.0 38.69
149.0	000.5005	0137.0	018.3	330.7	000.3750	0123.2	056.0 38.69
150.0	000.5005	0137.0	018.3	330.4	000.3750	0123.3	056.0 38.70
151.0	000.5005	0137.0	018.3	330.1	000.3750	0123.4	056.0 38.70
152.0	000.5005	0137.0	018.3	329.7	000.3750	0123.4	056.0 38.70
153.0	000.5005	0137.0	018.3	329.4	000.3750	0123.4	056.1 38.70
154.0	000.5005	0137.0	018.3	329.1	000.3750	0123.5	056.1 38.69
155.0	000.5005	0137.0	018.3	328.8	000.3750	0123.5	056.1 38.67
156.0	000.5005	0137.0	018.3	328.4	000.3750	0123.5	056.2 38.66
157.0	000.5005	0137.0	018.3	328.1	000.3750	0123.5	056.2 38.64
158.0	000.5005	0137.0	018.3	327.8	000.3750	0123.6	056.3 38.63
159.0	000.5005	0137.0	018.3	327.5	000.3750	0123.6	056.3 38.60
160.0	000.5005	0137.0	018.3	327.2	000.3750	0123.6	056.4 38.58
161.0	000.5005	0137.0	018.3	326.9	000.3750	0123.6	056.5 38.55
162.0	000.5005	0137.0	018.3	326.5	000.3750	0123.6	056.5 38.52
163.0	000.5005	0137.0	018.3	326.2	000.3750	0123.6	056.6 38.49
164.0	000.5005	0137.0	018.3	325.9	000.3750	0123.6	056.7 38.45
165.0	000.5005	0137.0	018.3	325.6	000.3750	0123.6	056.8 38.41
166.0	000.5005	0137.0	018.3	325.3	000.3750	0123.6	057.0 38.37
167.0	000.5005	0137.0	018.3	325.0	000.3750	0123.6	057.1 38.32
168.0	000.5005	0137.0	018.3	324.7	000.3750	0123.6	057.2 38.27
169.0	000.5005	0137.0	018.3	324.4	000.3750	0123.6	057.3 38.23
170.0	000.5005	0137.0	018.3	324.2	000.3750	0123.6	057.5 38.17
171.0	000.5005	0137.0	018.3	323.9	000.3750	0123.6	057.6 38.12
172.0	000.5005	0137.0	018.3	323.6	000.3750	0123.6	057.8 38.06
173.0	000.5005	0137.0	018.3	323.3	000.3750	0123.6	057.9 38.00
174.0	000.5005	0137.0	018.3	323.1	000.3750	0123.6	058.1 37.94
175.0	000.5005	0137.0	018.3	322.8	000.3750	0123.6	058.2 37.88
176.0	000.5005	0137.0	018.3	322.5	000.3750	0123.6	058.4 37.82
177.0	000.5005	0137.0	018.3	322.3	000.3750	0123.6	058.6 37.75
178.0	000.5005	0137.0	018.3	322.0	000.3750	0123.6	058.8 37.68
179.0	000.5005	0137.0	018.3	321.8	000.3750	0123.6	059.0 37.61
180.0	000.5005	0137.0	018.3	321.5	000.3750	0123.6	059.2 37.54
181.0	000.5005	0137.0	018.3	321.3	000.3750	0123.6	059.4 37.47
182.0	000.5005	0137.0	018.3	321.1	000.3750	0123.6	059.6 37.39
183.0	000.5005	0137.0	018.3	320.8	000.3750	0123.6	059.8 37.31
184.0	000.5005	0137.0	018.3	320.6	000.3750	0123.6	060.0 37.23
185.0	000.5005	0137.0	018.3	320.4	000.3750	0123.6	060.2 37.15
186.0	000.5005	0137.0	018.3	320.2	000.3750	0123.5	060.5 37.07
187.0	000.5005	0137.0	018.3	320.0	000.3750	0123.5	060.7 36.99
188.0	000.5005	0137.0	018.3	319.8	000.3750	0123.5	060.9 36.90
189.0	000.5005	0137.0	018.3	319.6	000.3750	0123.5	061.2 36.82
190.0	000.5005	0137.0	018.3	319.4	000.3750	0123.6	061.4 36.73
191.0	000.5005	0137.0	018.3	319.2	000.3750	0123.6	061.7 36.64
192.0	000.5005	0137.0	018.3	319.0	000.3750	0123.5	061.9 36.55
193.0	000.5005	0137.0	018.3	318.9	000.3750	0123.5	062.2 36.47



				Figure 2-1				
194.0	000.5005	0137.0	018.3	318.7	000.3750	0123.5	062.4	36.38
195.0	000.5005	0137.0	018.3	318.5	000.3750	0123.5	062.7	36.29
196.0	000.5005	0137.0	018.3	318.4	000.3750	0123.5	063.0	36.19
197.0	000.5005	0137.0	018.3	318.2	000.3750	0123.5	063.2	36.10
198.0	000.5005	0137.0	018.3	318.1	000.3750	0123.5	063.5	36.01
199.0	000.5005	0137.0	018.3	318.0	000.3750	0123.5	063.8	35.92
200.0	000.5005	0137.0	018.3	317.8	000.3750	0123.5	064.1	35.83
201.0	000.5005	0137.0	018.3	317.7	000.3750	0123.6	064.3	35.74
202.0	000.5005	0137.0	018.3	317.6	000.3750	0123.6	064.6	35.64
203.0	000.5005	0137.0	018.3	317.5	000.3750	0123.6	064.9	35.55
204.0	000.5005	0137.0	018.3	317.3	000.3750	0123.6	065.2	35.46
205.0	000.5005	0137.0	018.3	317.2	000.3750	0123.6	065.5	35.36
206.0	000.5005	0137.0	018.3	317.1	000.3750	0123.6	065.8	35.27
207.0	000.5005	0137.0	018.3	317.0	000.3750	0123.6	066.1	35.17
208.0	000.5005	0137.0	018.3	317.0	000.3750	0123.6	066.4	35.08
209.0	000.5005	0137.0	018.3	316.9	000.3750	0123.6	066.7	34.98

Figure 2-2  
Minor Amendment to Application for WHRQ

FMCommander Single Allocation Study - 03-17-2011 - NED 30 Meter  
WHRQ's Overlaps (In= 8.49 km, Out= 1.27 km)

WHRQ CH 201 A  
Lat= 41 22 37.8, Lng= 82 48 52.3  
0.375 kW 102.4 M HAAT, 300.8 M COR  
Prot.= 60 dBu, Intef.= 100 dBu

NEW-C CH 203 A BNPED20071018APM  
Lat= 41 11 54.8, Lng= 82 56 11.3  
1.0 kW 103 M HAAT, 345 M COR  
Prot.= 60 dBu, Intef.= 100 dBu

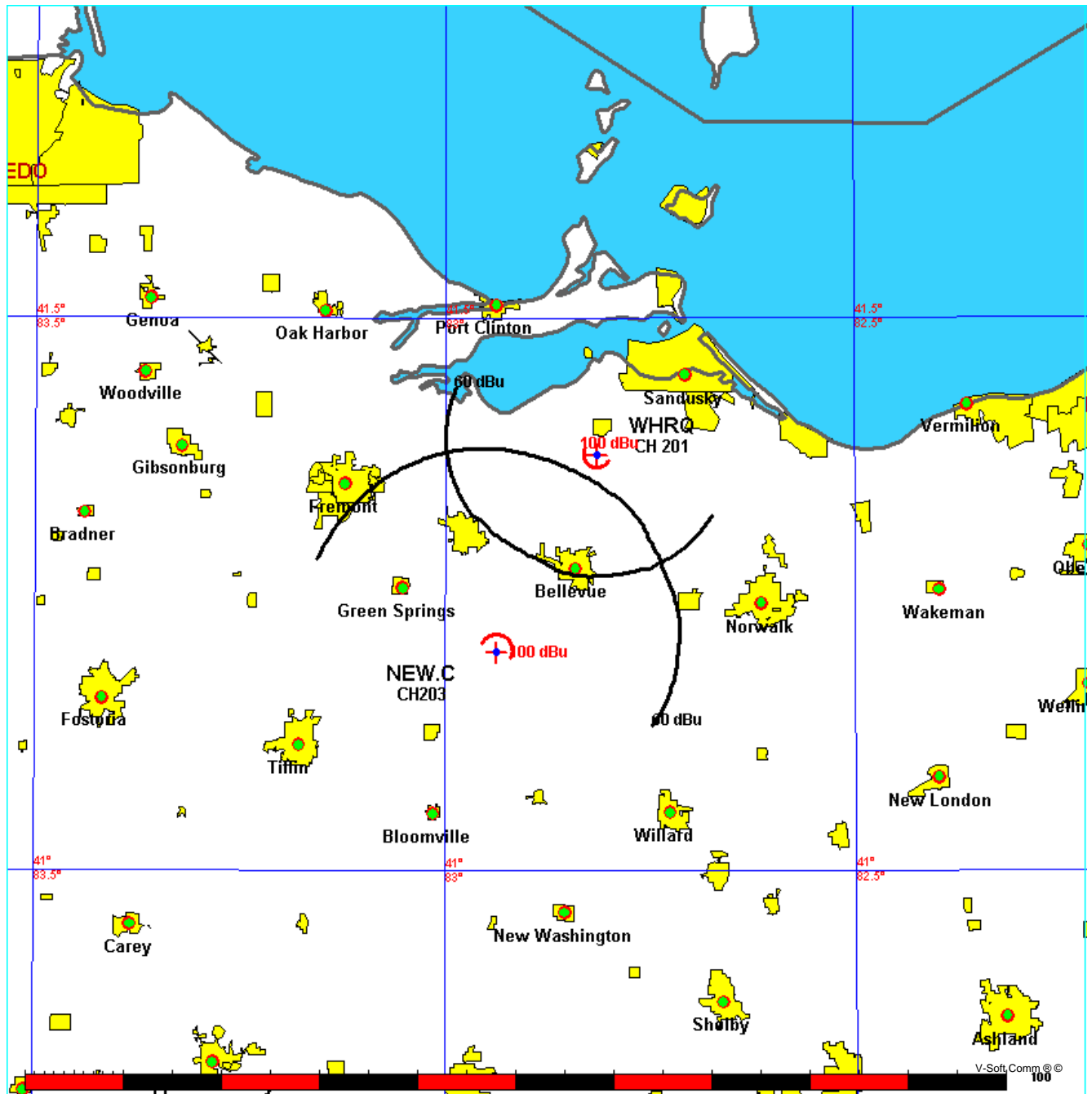


Figure 2-3

03-17-2011

Terrain Data

FMOver Analysis

WHRQ

Channel = 201A

Max ERP = 0.375 kW

RCAMSL = 300.8 M

N. Lat. 41 22 37.8

W. Lng. 82 48 52.3

Protected

60 dBu

NEW-C BNPED20071018APM

Channel = 203A

Max ERP = 1 kW

RCAMSL = 345 M

N. Lat. 41 11 54.8

W. Lng. 82 56 11.3

Interfering

100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
147.0	000.3750	0080.2	012.8	061.8	001.0000	0103.6	019.5	60.13	
148.0	000.3750	0080.0	012.7	061.8	001.0000	0103.6	019.2	60.31	
149.0	000.3750	0079.7	012.7	061.8	001.0000	0103.6	019.0	60.50	
150.0	000.3750	0079.0	012.7	061.7	001.0000	0103.7	018.8	60.68	
151.0	000.3750	0079.0	012.7	061.7	001.0000	0103.7	018.6	60.86	
152.0	000.3750	0078.9	012.7	061.7	001.0000	0103.7	018.3	61.05	
153.0	000.3750	0079.7	012.7	061.8	001.0000	0103.6	018.1	61.22	
154.0	000.3750	0079.6	012.7	061.8	001.0000	0103.6	017.9	61.40	
155.0	000.3750	0079.7	012.7	061.8	001.0000	0103.6	017.7	61.59	
156.0	000.3750	0078.7	012.6	061.5	001.0000	0103.7	017.5	61.78	
157.0	000.3750	0077.2	012.5	061.1	001.0000	0103.8	017.2	61.96	
158.0	000.3750	0076.8	012.5	060.9	001.0000	0103.9	017.0	62.14	
159.0	000.3750	0076.4	012.5	060.7	001.0000	0104.0	016.8	62.33	
160.0	000.3750	0075.8	012.4	060.5	001.0000	0104.1	016.6	62.51	
161.0	000.3750	0075.7	012.4	060.3	001.0000	0104.2	016.4	62.69	
162.0	000.3750	0075.6	012.4	060.1	001.0000	0104.3	016.2	62.88	
163.0	000.3750	0075.1	012.4	059.8	001.0000	0104.4	016.0	63.06	
164.0	000.3750	0074.8	012.4	059.6	001.0000	0104.5	015.8	63.24	
165.0	000.3750	0074.8	012.4	059.4	001.0000	0104.6	015.6	63.42	
166.0	000.3750	0074.6	012.3	059.1	001.0000	0104.6	015.4	63.60	
167.0	000.3750	0074.4	012.3	058.8	001.0000	0104.7	015.2	63.78	
168.0	000.3750	0074.4	012.3	058.5	001.0000	0104.7	015.0	63.82	
169.0	000.3750	0074.3	012.3	058.2	001.0000	0104.8	014.8	64.05	
170.0	000.3750	0074.2	012.3	057.9	001.0000	0104.8	014.6	64.27	
171.0	000.3750	0074.0	012.3	057.5	001.0000	0105.0	014.4	64.51	
172.0	000.3750	0073.9	012.3	057.1	001.0000	0105.1	014.2	64.74	
173.0	000.3750	0073.8	012.3	056.7	001.0000	0105.3	014.0	64.99	
174.0	000.3750	0073.7	012.3	056.3	001.0000	0105.5	013.8	65.24	
175.0	000.3750	0073.7	012.3	055.9	001.0000	0105.6	013.6	65.49	
176.0	000.3750	0073.5	012.3	055.4	001.0000	0105.7	013.4	65.72	
177.0	000.3750	0073.5	012.3	054.9	001.0000	0105.9	013.3	65.99	
178.0	000.3750	0073.8	012.3	054.5	001.0000	0106.1	013.1	66.26	
179.0	000.3750	0074.0	012.3	054.0	001.0000	0106.1	012.9	66.51	
180.0	000.3750	0074.0	012.3	053.4	001.0000	0106.3	012.7	66.76	
181.0	000.3750	0073.9	012.3	052.8	001.0000	0106.9	012.5	67.05	
182.0	000.3750	0073.9	012.3	052.2	001.0000	0107.8	012.4	67.37	
183.0	000.3750	0074.4	012.3	051.7	001.0000	0108.4	012.2	67.68	
184.0	000.3750	0074.7	012.3	051.1	001.0000	0108.7	012.0	67.97	
185.0	000.3750	0074.7	012.3	050.4	001.0000	0109.2	011.9	68.24	
186.0	000.3750	0074.8	012.4	049.7	001.0000	0109.5	011.7	68.51	
187.0	000.3750	0075.2	012.4	049.0	001.0000	0109.9	011.5	68.80	
188.0	000.3750	0075.6	012.4	048.2	001.0000	0110.4	011.4	69.09	
189.0	000.3750	0075.8	012.4	047.4	001.0000	0110.9	011.2	69.37	
190.0	000.3750	0075.7	012.4	046.6	001.0000	0111.5	011.1	69.62	
191.0	000.3750	0075.4	012.4	045.6	001.0000	0111.8	011.0	69.83	
192.0	000.3750	0075.0	012.4	044.6	001.0000	0111.7	010.9	69.98	
193.0	000.3750	0074.7	012.3	043.5	001.0000	0112.2	010.8	70.17	
194.0	000.3750	0074.8	012.4	042.5	001.0000	0112.5	010.7	70.38	
195.0	000.3750	0075.4	012.4	041.6	001.0000	0112.9	010.5	70.65	

Figure 2-3

196.0	000.3750	0075.8	012.4	040.6	001.0000	0112.7	010.4	70.84
197.0	000.3750	0075.4	012.4	039.4	001.0000	0112.4	010.4	70.92
198.0	000.3750	0074.9	012.4	038.3	001.0000	0112.8	010.3	71.03
199.0	000.3750	0074.5	012.3	037.1	001.0000	0111.7	010.3	71.03
200.0	000.3750	0074.3	012.3	035.9	001.0000	0111.5	010.2	71.10
201.0	000.3750	0074.0	012.3	034.7	001.0000	0111.2	010.2	71.13
202.0	000.3750	0073.5	012.3	033.5	001.0000	0111.4	010.2	71.16
203.0	000.3750	0073.3	012.2	032.3	001.0000	0111.7	010.1	71.23
204.0	000.3750	0073.0	012.2	031.1	001.0000	0112.2	010.1	71.28
205.0	000.3750	0072.7	012.2	029.9	001.0000	0111.8	010.1	71.25
206.0	000.3750	0072.5	012.2	028.7	001.0000	0112.2	010.1	71.28
207.0	000.3750	0072.1	012.2	027.5	001.0000	0111.4	010.2	71.19
208.0	000.3750	0072.2	012.2	026.3	001.0000	0111.5	010.2	71.20
209.0	000.3750	0072.4	012.2	025.1	001.0000	0111.9	010.2	71.24
210.0	000.3750	0072.6	012.2	023.9	001.0000	0112.4	010.2	71.27
211.0	000.3750	0072.9	012.2	022.7	001.0000	0111.9	010.2	71.22
212.0	000.3750	0073.4	012.2	021.5	001.0000	0111.9	010.2	71.23
213.0	000.3750	0074.1	012.3	020.2	001.0000	0112.3	010.2	71.27
214.0	000.3750	0074.5	012.3	019.0	001.0000	0112.8	010.2	71.27
215.0	000.3750	0074.5	012.3	017.9	001.0000	0113.4	010.2	71.21
216.0	000.3750	0074.8	012.4	016.7	001.0000	0113.7	010.3	71.16
217.0	000.3750	0075.1	012.4	015.5	001.0000	0113.8	010.3	71.07
218.0	000.3750	0075.6	012.4	014.3	001.0000	0113.9	010.4	71.00
219.0	000.3750	0076.1	012.4	013.2	001.0000	0114.4	010.4	70.93
220.0	000.3750	0076.6	012.5	012.0	001.0000	0115.1	010.5	70.87
221.0	000.3750	0077.2	012.5	010.9	001.0000	0115.2	010.6	70.76
222.0	000.3750	0077.6	012.6	009.8	001.0000	0115.4	010.7	70.62
223.0	000.3750	0078.4	012.6	008.6	001.0000	0115.7	010.7	70.53
224.0	000.3750	0079.0	012.7	007.5	001.0000	0116.1	010.8	70.41
225.0	000.3750	0079.8	012.7	006.4	001.0000	0116.3	010.9	70.27
226.0	000.3750	0080.6	012.8	005.3	001.0000	0116.8	011.0	70.15
227.0	000.3750	0081.4	012.8	004.3	001.0000	0117.4	011.1	70.02
228.0	000.3750	0082.1	012.9	003.2	001.0000	0118.0	011.2	69.87
229.0	000.3750	0083.0	013.0	002.2	001.0000	0118.4	011.3	69.72
230.0	000.3750	0083.9	013.0	001.2	001.0000	0118.9	011.5	69.55
231.0	000.3750	0084.7	013.1	000.3	001.0000	0119.2	011.6	69.36
232.0	000.3750	0086.1	013.2	359.2	001.0000	0119.6	011.7	69.21
233.0	000.3750	0086.9	013.3	358.3	001.0000	0119.7	011.9	68.99
234.0	000.3750	0087.4	013.3	357.5	001.0000	0119.9	012.0	68.75
235.0	000.3750	0087.7	013.3	356.8	001.0000	0120.2	012.2	68.50
236.0	000.3750	0088.1	013.3	356.1	001.0000	0120.5	012.4	68.25
237.0	000.3750	0088.2	013.3	355.6	001.0000	0120.7	012.6	67.98
238.0	000.3750	0088.5	013.4	355.0	001.0000	0120.9	012.8	67.72
239.0	000.3750	0089.1	013.4	354.4	001.0000	0121.0	013.0	67.46
240.0	000.3750	0090.5	013.5	353.6	001.0000	0121.0	013.2	67.24
241.0	000.3750	0092.2	013.7	352.6	001.0000	0121.3	013.3	67.03
242.0	000.3750	0094.9	013.8	351.5	001.0000	0121.6	013.5	66.85
243.0	000.3750	0096.7	014.0	350.6	001.0000	0122.0	013.7	66.64
244.0	000.3750	0097.9	014.1	350.0	001.0000	0122.2	013.9	66.40
245.0	000.3750	0098.8	014.1	349.4	001.0000	0122.2	014.1	66.13
246.0	000.3750	0099.6	014.2	349.0	001.0000	0122.3	014.3	65.87
247.0	000.3750	0100.5	014.3	348.5	001.0000	0122.3	014.6	65.61
248.0	000.3750	0101.1	014.3	348.2	001.0000	0122.6	014.8	65.36
249.0	000.3750	0101.9	014.4	347.8	001.0000	0122.9	015.0	65.26
250.0	000.3750	0102.3	014.4	347.5	001.0000	0122.9	015.3	65.05
251.0	000.3750	0102.9	014.4	347.3	001.0000	0122.8	015.5	64.84
252.0	000.3750	0103.5	014.5	347.0	001.0000	0122.8	015.8	64.63
253.0	000.3750	0104.2	014.5	346.8	001.0000	0122.8	016.0	64.42
254.0	000.3750	0104.7	014.6	346.6	001.0000	0122.8	016.3	64.21
255.0	000.3750	0105.4	014.6	346.4	001.0000	0122.8	016.5	64.01
256.0	000.3750	0106.1	014.7	346.2	001.0000	0122.9	016.8	63.80
257.0	000.3750	0106.9	014.7	346.0	001.0000	0122.9	017.0	63.59
258.0	000.3750	0107.6	014.8	345.8	001.0000	0122.9	017.3	63.37
259.0	000.3750	0108.3	014.8	345.7	001.0000	0123.0	017.6	63.16
260.0	000.3750	0108.7	014.9	345.7	001.0000	0123.0	017.8	62.95

				Figure 2-3			
261.0	000.3750	0109.3	014.9	345.6	001.0000	0123.0	018.1
262.0	000.3750	0110.0	015.0	345.5	001.0000	0123.0	018.3
263.0	000.3750	0110.7	015.0	345.5	001.0000	0123.0	018.6
264.0	000.3750	0111.3	015.1	345.5	001.0000	0123.0	018.9
265.0	000.3750	0111.8	015.1	345.5	001.0000	0123.0	019.1
266.0	000.3750	0112.1	015.1	345.5	001.0000	0123.0	019.4

03-17-2011 Terrain Data

NEW-C BNPED20071018APM

WHRQ

Channel = 203A  
 Max ERP = 1 kW  
 RCAMSL = 345 M  
 N. Lat. 41 11 54.8  
 W. Lng. 82 56 11.3  
 Protected  
 60 dBu

Channel = 201A  
 Max ERP = 0.375 kW  
 RCAMSL = 300.8 M  
 N. Lat. 41 22 37.8  
 W. Lng. 82 48 52.3  
 Interfering  
 100 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
327.0	001.0000	0124.4	020.7	263.6	000.3750	0111.1	021.6	54.79	
328.0	001.0000	0124.5	020.7	264.0	000.3750	0111.3	021.3	55.05	
329.0	001.0000	0124.7	020.8	264.5	000.3750	0111.5	021.0	55.32	
330.0	001.0000	0124.5	020.7	264.9	000.3750	0111.7	020.7	55.59	
331.0	001.0000	0124.4	020.7	265.3	000.3750	0111.9	020.3	55.87	
332.0	001.0000	0124.4	020.7	265.7	000.3750	0112.0	020.0	56.14	
333.0	001.0000	0124.3	020.7	266.1	000.3750	0112.1	019.7	56.41	
334.0	001.0000	0124.2	020.7	266.5	000.3750	0112.2	019.3	56.70	
335.0	001.0000	0124.2	020.7	266.9	000.3750	0112.4	019.0	56.98	
336.0	001.0000	0124.3	020.7	267.3	000.3750	0112.6	018.7	57.26	
337.0	001.0000	0124.3	020.7	267.7	000.3750	0112.7	018.3	57.55	
338.0	001.0000	0124.3	020.7	268.1	000.3750	0113.0	018.0	57.84	
339.0	001.0000	0124.9	020.8	268.6	000.3750	0113.3	017.7	58.14	
340.0	001.0000	0124.2	020.7	268.9	000.3750	0113.5	017.3	58.45	
341.0	001.0000	0124.3	020.7	269.3	000.3750	0113.8	017.0	58.75	
342.0	001.0000	0124.2	020.7	269.6	000.3750	0114.0	016.6	59.06	
343.0	001.0000	0124.0	020.7	270.0	000.3750	0114.2	016.3	59.36	
344.0	001.0000	0123.4	020.7	270.2	000.3750	0114.3	015.9	59.67	
345.0	001.0000	0123.1	020.6	270.4	000.3750	0114.4	015.5	59.97	
346.0	001.0000	0122.9	020.6	270.7	000.3750	0114.6	015.2	60.28	
347.0	001.0000	0122.8	020.6	271.0	000.3750	0114.7	014.8	60.49	
348.0	001.0000	0122.7	020.6	271.3	000.3750	0114.9	014.5	60.90	
349.0	001.0000	0122.3	020.6	271.6	000.3750	0115.0	014.1	61.33	
350.0	001.0000	0122.2	020.6	271.8	000.3750	0115.1	013.8	61.77	
351.0	001.0000	0121.8	020.5	272.0	000.3750	0115.2	013.4	62.23	
352.0	001.0000	0121.5	020.5	272.2	000.3750	0115.3	013.1	62.70	
353.0	001.0000	0121.2	020.5	272.3	000.3750	0115.4	012.7	63.20	
354.0	001.0000	0121.0	020.5	272.5	000.3750	0115.4	012.4	63.71	
355.0	001.0000	0120.9	020.5	272.7	000.3750	0115.5	012.0	64.24	
356.0	001.0000	0120.5	020.4	272.8	000.3750	0115.6	011.6	64.78	
357.0	001.0000	0120.1	020.4	272.8	000.3750	0115.6	011.3	65.35	
358.0	001.0000	0119.8	020.4	272.9	000.3750	0115.6	010.9	65.93	
359.0	001.0000	0119.6	020.4	272.9	000.3750	0115.6	010.6	66.53	
000.0	001.0000	0119.4	020.4	273.0	000.3750	0115.6	010.2	67.15	
001.0	001.0000	0118.9	020.3	272.9	000.3750	0115.6	009.9	67.78	
002.0	001.0000	0118.5	020.3	272.7	000.3750	0115.5	009.5	68.42	
003.0	001.0000	0118.1	020.3	272.5	000.3750	0115.4	009.1	69.09	
004.0	001.0000	0117.6	020.2	272.2	000.3750	0115.3	008.8	69.76	
005.0	001.0000	0117.0	020.2	271.8	000.3750	0115.1	008.4	70.44	

Figure 2-3

006.0	001.0000	0116.4	020.1	271.2	000.3750	0114.8	008.1	71.13
007.0	001.0000	0116.1	020.1	270.9	000.3750	0114.7	007.8	71.87
008.0	001.0000	0115.9	020.1	270.4	000.3750	0114.4	007.4	72.67
009.0	001.0000	0115.5	020.0	269.7	000.3750	0114.1	007.1	73.51
010.0	001.0000	0115.4	020.0	269.1	000.3750	0113.7	006.7	74.39
011.0	001.0000	0115.2	020.0	268.3	000.3750	0113.1	006.4	75.28
012.0	001.0000	0115.1	020.0	267.5	000.3750	0112.6	006.0	76.21
013.0	001.0000	0114.6	020.0	266.2	000.3750	0112.1	005.7	77.13
014.0	001.0000	0114.0	019.9	264.5	000.3750	0111.5	005.4	78.04
015.0	001.0000	0113.9	019.9	263.1	000.3750	0110.8	005.1	79.00
016.0	001.0000	0113.8	019.9	261.5	000.3750	0109.6	004.8	79.92
017.0	001.0000	0113.6	019.9	259.4	000.3750	0108.5	004.5	80.88
018.0	001.0000	0113.3	019.9	256.8	000.3750	0106.8	004.2	81.83
019.0	001.0000	0112.8	019.8	253.6	000.3750	0104.4	003.9	82.70
020.0	001.0000	0112.3	019.8	249.8	000.3750	0102.3	003.7	83.58
021.0	001.0000	0112.0	019.7	245.8	000.3750	0099.4	003.4	84.40
022.0	001.0000	0111.8	019.7	241.1	000.3750	0092.6	003.2	84.86
023.0	001.0000	0112.0	019.7	236.1	000.3750	0088.1	003.0	85.59
024.0	001.0000	0112.4	019.8	230.6	000.3750	0084.3	002.8	86.46
025.0	001.0000	0112.0	019.7	223.6	000.3750	0078.9	002.7	86.59
026.0	001.0000	0111.5	019.7	216.3	000.3750	0074.9	002.6	86.54
027.0	001.0000	0111.3	019.7	208.8	000.3750	0072.3	002.6	86.42
028.0	001.0000	0111.7	019.7	201.2	000.3750	0073.9	002.6	86.68
029.0	001.0000	0112.2	019.8	193.7	000.3750	0074.7	002.6	86.63
030.0	001.0000	0111.8	019.7	187.0	000.3750	0075.2	002.8	85.70
031.0	001.0000	0112.2	019.8	180.5	000.3750	0073.9	002.9	84.82
032.0	001.0000	0111.8	019.7	175.4	000.3750	0073.5	003.1	83.56
033.0	001.0000	0111.5	019.7	171.0	000.3750	0074.0	003.4	82.41
034.0	001.0000	0111.2	019.7	167.3	000.3750	0074.3	003.6	81.22
035.0	001.0000	0111.2	019.7	163.9	000.3750	0074.8	003.9	80.12
036.0	001.0000	0111.4	019.7	160.7	000.3750	0075.7	004.1	79.10
037.0	001.0000	0111.6	019.7	158.1	000.3750	0076.7	004.4	78.10
038.0	001.0000	0112.7	019.8	154.9	000.3750	0079.7	004.7	77.51
039.0	001.0000	0112.4	019.8	153.5	000.3750	0079.5	005.0	76.38
040.0	001.0000	0112.4	019.8	151.9	000.3750	0078.9	005.3	75.26
041.0	001.0000	0112.8	019.8	150.3	000.3750	0079.0	005.6	74.25
042.0	001.0000	0112.8	019.8	149.2	000.3750	0079.6	006.0	73.29
043.0	001.0000	0112.3	019.8	148.7	000.3750	0079.8	006.3	72.30
044.0	001.0000	0112.0	019.7	148.2	000.3750	0080.1	006.6	71.38
045.0	001.0000	0111.7	019.7	147.7	000.3750	0080.0	007.0	70.46
046.0	001.0000	0111.8	019.7	147.1	000.3750	0080.2	007.3	69.64
047.0	001.0000	0111.1	019.7	147.1	000.3750	0080.2	007.7	68.83
048.0	001.0000	0110.6	019.6	147.0	000.3750	0080.2	008.0	68.10
049.0	001.0000	0109.9	019.6	147.1	000.3750	0080.2	008.4	67.43
050.0	001.0000	0109.4	019.5	147.1	000.3750	0080.2	008.7	66.77
051.0	001.0000	0108.8	019.5	147.2	000.3750	0080.1	009.0	66.13
052.0	001.0000	0108.1	019.4	147.4	000.3750	0080.1	009.4	65.49
053.0	001.0000	0106.6	019.2	148.0	000.3750	0080.0	009.7	64.86
054.0	001.0000	0106.1	019.2	148.2	000.3750	0080.1	010.1	64.26
055.0	001.0000	0105.9	019.2	148.1	000.3750	0080.1	010.4	63.68
056.0	001.0000	0105.6	019.2	148.2	000.3750	0080.1	010.7	63.11
057.0	001.0000	0105.1	019.1	148.4	000.3750	0080.0	011.1	62.55
058.0	001.0000	0104.8	019.1	148.5	000.3750	0079.9	011.4	62.00
059.0	001.0000	0104.7	019.1	148.6	000.3750	0079.9	011.7	61.47
060.0	001.0000	0104.4	019.0	148.8	000.3750	0079.8	012.1	60.96
061.0	001.0000	0103.9	019.0	149.0	000.3750	0079.7	012.4	60.45
062.0	001.0000	0103.5	019.0	149.3	000.3750	0079.6	012.7	59.96
063.0	001.0000	0103.0	018.9	149.6	000.3750	0079.4	013.1	59.48
064.0	001.0000	0102.9	018.9	149.7	000.3750	0079.3	013.4	59.01
065.0	001.0000	0102.8	018.9	149.9	000.3750	0079.1	013.7	58.56
066.0	001.0000	0102.7	018.9	150.0	000.3750	0079.0	014.0	58.14
067.0	001.0000	0102.6	018.9	150.2	000.3750	0079.0	014.4	57.74
068.0	001.0000	0102.5	018.8	150.4	000.3750	0079.0	014.7	57.35
069.0	001.0000	0102.6	018.9	150.6	000.3750	0079.0	015.0	57.17
070.0	001.0000	0102.5	018.9	150.8	000.3750	0078.9	015.3	56.88

				Figure 2-3				
071.0	001.0000	0102.7	018.9	150.9	000.3750	0079.0	015.7	56.60
072.0	001.0000	0102.9	018.9	151.1	000.3750	0079.0	016.0	56.32
073.0	001.0000	0102.8	018.9	151.3	000.3750	0079.0	016.3	56.04
074.0	001.0000	0102.9	018.9	151.5	000.3750	0079.0	016.6	55.77
075.0	001.0000	0102.9	018.9	151.8	000.3750	0079.0	017.0	55.49
076.0	001.0000	0102.8	018.9	152.1	000.3750	0078.9	017.3	55.21
077.0	001.0000	0102.9	018.9	152.3	000.3750	0079.2	017.6	54.97
078.0	001.0000	0102.9	018.9	152.6	000.3750	0079.6	017.9	54.75
079.0	001.0000	0102.9	018.9	152.9	000.3750	0079.7	018.2	54.49
080.0	001.0000	0102.5	018.9	153.3	000.3750	0079.6	018.6	54.22
081.0	001.0000	0102.2	018.8	153.7	000.3750	0079.5	018.9	53.95
082.0	001.0000	0101.9	018.8	154.1	000.3750	0079.6	019.2	53.72
083.0	001.0000	0101.6	018.8	154.5	000.3750	0079.7	019.5	53.48
084.0	001.0000	0101.4	018.7	154.8	000.3750	0079.7	019.8	53.24
085.0	001.0000	0101.2	018.7	155.2	000.3750	0079.6	020.1	52.98
086.0	001.0000	0100.7	018.7	155.7	000.3750	0079.1	020.4	52.68

Figure 3  
Minor Amendment to Application for WHRQ

FMCommander Single Allocation Study - 03-17-2011 - NED 30 Meter  
WHRQ's Overlaps (In= 63.42 km, Out= 1.29 km)

WHRQ CH 201 A

Lat= 41 22 37.8, Lng= 82 48 52.3  
0.375 kW 102.4 M HAAT, 300.8 M COR  
Prot.= 60 dBu, Intef.= 94 dBu

CIMX^ CH 204 C1

Lat= 42 10 15.0, Lng= 82 59 29.0  
Max CIs: 100.0 kW 299 M HAAT, 483 M COR  
Prot.= 54 dBu, Intef.= 100 dBu

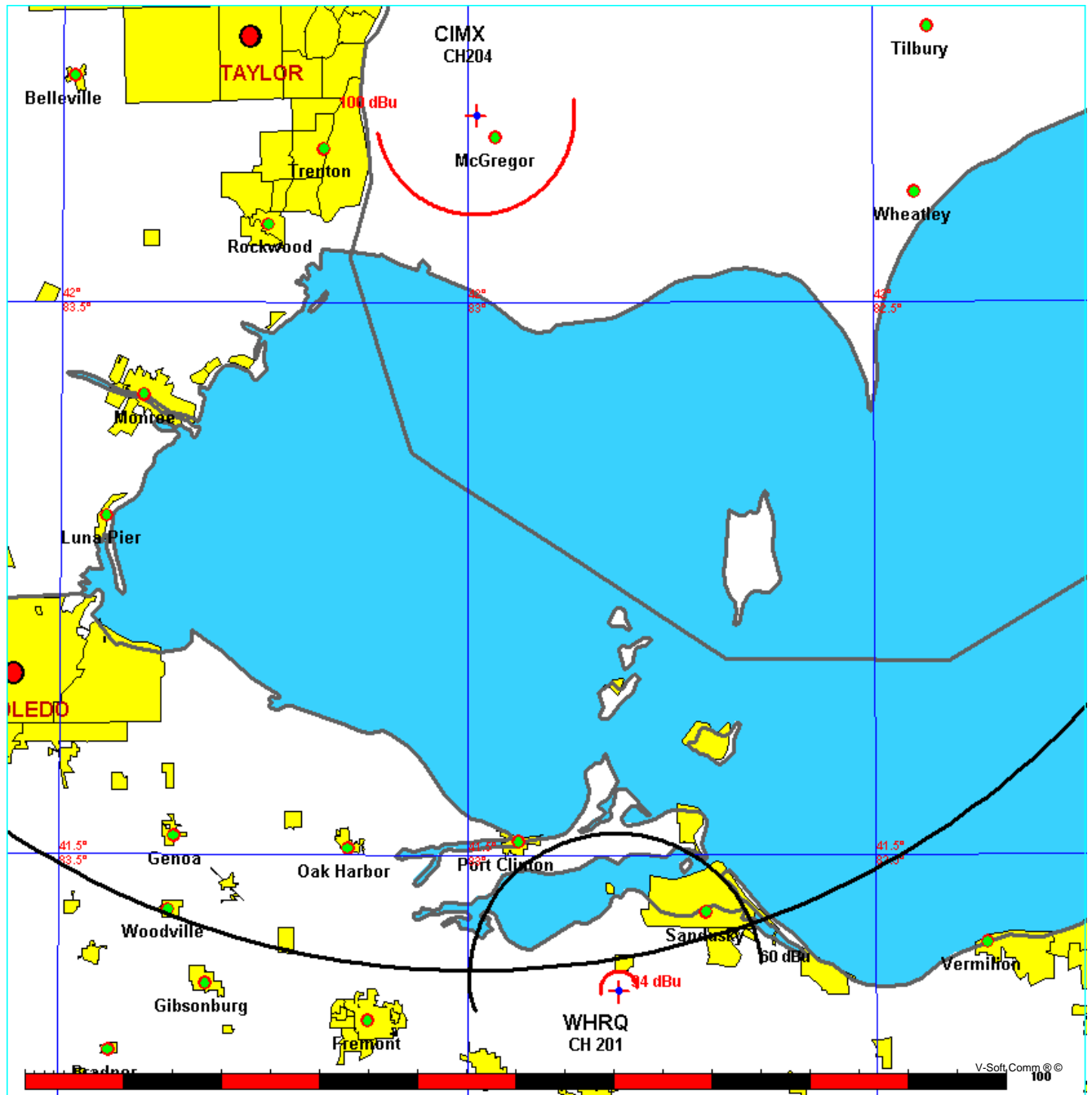




Figure 3-1

03-17-2011

Terrain Data

FMOver Analysis

WHRQ

Channel = 201A  
 Max ERP = 0.375 kW  
 RCAMSL = 300.8 M  
 N. Lat. 41 22 37.8  
 W. Lng. 82 48 52.3  
 Protected  
 60 dBu

CIMX

(^ Max Class Parameters)

Channel = 204C1  
 Max ERP = 100 kW  
 RCAMSL = 483 M  
 N. Lat. 42 10 15.0  
 W. Lng. 82 59 29.0  
 Interfering  
 100 dBu

Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Azimuth (degrees)	ERP (kW)	HAAT (m)	Dist (km)	Actual (dBu)	IX (km)
291.0	000.3750	0118.6	015.6	179.9	100.0000	0295.9	082.6	60.94	
292.0	000.3750	0118.8	015.6	179.8	100.0000	0295.9	082.3	61.02	
293.0	000.3750	0119.0	015.6	179.8	100.0000	0295.9	082.0	61.10	
294.0	000.3750	0119.2	015.6	179.7	100.0000	0295.9	081.8	61.19	
295.0	000.3750	0119.4	015.6	179.6	100.0000	0295.9	081.5	61.27	
296.0	000.3750	0119.6	015.7	179.6	100.0000	0295.9	081.3	61.35	
297.0	000.3750	0119.8	015.7	179.5	100.0000	0295.9	081.0	61.43	
298.0	000.3750	0120.0	015.7	179.4	100.0000	0295.9	080.8	61.51	
299.0	000.3750	0120.2	015.7	179.3	100.0000	0295.9	080.5	61.59	
300.0	000.3750	0120.4	015.7	179.2	100.0000	0295.9	080.3	61.67	
301.0	000.3750	0120.7	015.7	179.1	100.0000	0295.9	080.1	61.75	
302.0	000.3750	0120.9	015.7	179.0	100.0000	0295.9	079.8	61.83	
303.0	000.3750	0121.1	015.8	178.9	100.0000	0295.9	079.6	61.91	
304.0	000.3750	0121.3	015.8	178.8	100.0000	0295.9	079.3	61.99	
305.0	000.3750	0121.5	015.8	178.7	100.0000	0295.9	079.1	62.06	
306.0	000.3750	0121.7	015.8	178.6	100.0000	0295.9	078.9	62.14	
307.0	000.3750	0121.9	015.8	178.5	100.0000	0295.9	078.7	62.21	
308.0	000.3750	0122.1	015.8	178.4	100.0000	0295.9	078.4	62.29	
309.0	000.3750	0122.3	015.8	178.3	100.0000	0295.9	078.2	62.36	
310.0	000.3750	0122.5	015.9	178.1	100.0000	0295.9	078.0	62.43	
311.0	000.3750	0122.7	015.9	178.0	100.0000	0295.9	077.8	62.51	
312.0	000.3750	0122.9	015.9	177.9	100.0000	0295.9	077.6	62.58	
313.0	000.3750	0123.1	015.9	177.7	100.0000	0295.9	077.4	62.65	
314.0	000.3750	0123.3	015.9	177.6	100.0000	0295.9	077.2	62.71	
315.0	000.3750	0123.5	015.9	177.4	100.0000	0295.9	077.0	62.78	
316.0	000.3750	0123.5	015.9	177.3	100.0000	0295.9	076.8	62.84	
317.0	000.3750	0123.5	015.9	177.1	100.0000	0295.9	076.6	62.90	
318.0	000.3750	0123.5	015.9	177.0	100.0000	0295.9	076.4	62.96	
319.0	000.3750	0123.4	015.9	176.8	100.0000	0295.9	076.3	63.02	
320.0	000.3750	0123.4	015.9	176.6	100.0000	0295.9	076.1	63.08	
321.0	000.3750	0123.4	015.9	176.5	100.0000	0295.9	075.9	63.13	
322.0	000.3750	0123.4	015.9	176.3	100.0000	0295.9	075.8	63.19	
323.0	000.3750	0123.3	015.9	176.1	100.0000	0295.9	075.6	63.24	
324.0	000.3750	0123.3	015.9	175.9	100.0000	0295.9	075.5	63.29	
325.0	000.3750	0123.3	015.9	175.8	100.0000	0295.9	075.3	63.34	
326.0	000.3750	0123.2	015.9	175.6	100.0000	0295.9	075.2	63.39	
327.0	000.3750	0123.2	015.9	175.4	100.0000	0295.9	075.1	63.43	
328.0	000.3750	0123.2	015.9	175.2	100.0000	0295.9	074.9	63.48	
329.0	000.3750	0123.2	015.9	175.0	100.0000	0295.9	074.8	63.52	
330.0	000.3750	0123.1	015.9	174.8	100.0000	0295.9	074.7	63.56	
331.0	000.3750	0123.1	015.9	174.6	100.0000	0295.9	074.6	63.60	
332.0	000.3750	0123.1	015.9	174.4	100.0000	0295.9	074.5	63.63	
333.0	000.3750	0123.1	015.9	174.2	100.0000	0295.9	074.4	63.67	
334.0	000.3750	0123.0	015.9	174.0	100.0000	0295.9	074.3	63.70	
335.0	000.3750	0123.0	015.9	173.8	100.0000	0295.9	074.2	63.73	
336.0	000.3750	0123.0	015.9	173.6	100.0000	0295.9	074.1	63.76	
337.0	000.3750	0123.0	015.9	173.4	100.0000	0295.9	074.0	63.79	
338.0	000.3750	0122.9	015.9	173.2	100.0000	0295.9	073.9	63.81	

Figure 3-1

339.0	000.3750	0122.9	015.9	173.0	100.0000	0295.9	073.9	63.84
340.0	000.3750	0122.9	015.9	172.8	100.0000	0295.9	073.8	63.86
341.0	000.3750	0122.9	015.9	172.6	100.0000	0295.9	073.7	63.88
342.0	000.3750	0122.8	015.9	172.4	100.0000	0295.8	073.7	63.90
343.0	000.3750	0122.8	015.9	172.1	100.0000	0295.8	073.7	63.91
344.0	000.3750	0122.8	015.9	171.9	100.0000	0295.8	073.6	63.93
345.0	000.3750	0122.7	015.9	171.7	100.0000	0295.8	073.6	63.94
346.0	000.3750	0122.7	015.9	171.5	100.0000	0295.8	073.6	63.95
347.0	000.3750	0122.7	015.9	171.3	100.0000	0295.8	073.5	63.95
348.0	000.3750	0122.7	015.9	171.1	100.0000	0295.8	073.5	63.96
349.0	000.3750	0122.6	015.9	170.9	100.0000	0295.8	073.5	63.96
350.0	000.3750	0122.6	015.9	170.6	100.0000	0295.8	073.5	63.96
351.0	000.3750	0122.6	015.9	170.4	100.0000	0295.8	073.5	63.96
352.0	000.3750	0122.6	015.9	170.2	100.0000	0295.8	073.5	63.96
353.0	000.3750	0122.5	015.9	170.0	100.0000	0295.8	073.5	63.96
354.0	000.3750	0122.5	015.9	169.8	100.0000	0295.8	073.5	63.95
355.0	000.3750	0122.5	015.9	169.6	100.0000	0295.8	073.6	63.94
356.0	000.3750	0122.5	015.9	169.3	100.0000	0295.8	073.6	63.93
357.0	000.3750	0122.4	015.9	169.1	100.0000	0295.8	073.6	63.92
358.0	000.3750	0122.4	015.9	168.9	100.0000	0295.8	073.7	63.90
359.0	000.3750	0122.4	015.9	168.7	100.0000	0295.8	073.7	63.89
000.0	000.3750	0122.4	015.9	168.5	100.0000	0295.8	073.8	63.87
001.0	000.3750	0122.2	015.8	168.3	100.0000	0295.8	073.8	63.84
002.0	000.3750	0122.1	015.8	168.1	100.0000	0295.8	073.9	63.82
003.0	000.3750	0121.9	015.8	167.9	100.0000	0295.8	074.0	63.79
004.0	000.3750	0121.8	015.8	167.7	100.0000	0295.8	074.1	63.76
005.0	000.3750	0121.7	015.8	167.5	100.0000	0295.8	074.2	63.73
006.0	000.3750	0121.5	015.8	167.3	100.0000	0295.8	074.3	63.70
007.0	000.3750	0121.4	015.8	167.1	100.0000	0295.8	074.4	63.66
008.0	000.3750	0121.3	015.8	166.9	100.0000	0295.8	074.5	63.63
009.0	000.3750	0121.1	015.8	166.7	100.0000	0295.8	074.6	63.59
010.0	000.3750	0121.0	015.8	166.5	100.0000	0295.8	074.7	63.55
011.0	000.3750	0120.8	015.7	166.3	100.0000	0295.8	074.8	63.51
012.0	000.3750	0120.7	015.7	166.1	100.0000	0295.8	074.9	63.47
013.0	000.3750	0120.6	015.7	165.9	100.0000	0295.8	075.1	63.42
014.0	000.3750	0120.4	015.7	165.7	100.0000	0295.8	075.2	63.37
015.0	000.3750	0120.3	015.7	165.6	100.0000	0295.8	075.3	63.33
016.0	000.3750	0120.2	015.7	165.4	100.0000	0295.8	075.5	63.28
017.0	000.3750	0120.0	015.7	165.2	100.0000	0295.8	075.6	63.22
018.0	000.3750	0119.9	015.7	165.0	100.0000	0295.8	075.8	63.17
019.0	000.3750	0119.7	015.7	164.9	100.0000	0295.8	076.0	63.12
020.0	000.3750	0119.6	015.7	164.7	100.0000	0295.8	076.1	63.06
021.0	000.3750	0119.5	015.7	164.5	100.0000	0295.8	076.3	63.00
022.0	000.3750	0119.3	015.6	164.4	100.0000	0295.8	076.5	62.95
023.0	000.3750	0119.2	015.6	164.2	100.0000	0295.8	076.6	62.89
024.0	000.3750	0119.1	015.6	164.1	100.0000	0295.8	076.8	62.83
025.0	000.3750	0118.9	015.6	163.9	100.0000	0295.8	077.0	62.76
026.0	000.3750	0118.8	015.6	163.8	100.0000	0295.7	077.2	62.70
027.0	000.3750	0118.6	015.6	163.6	100.0000	0295.7	077.4	62.63
028.0	000.3750	0118.5	015.6	163.5	100.0000	0295.7	077.6	62.57
029.0	000.3750	0118.4	015.6	163.4	100.0000	0295.7	077.8	62.50
030.0	000.3750	0118.2	015.6	163.2	100.0000	0295.7	078.0	62.43
031.0	000.3750	0118.1	015.6	163.1	100.0000	0295.7	078.2	62.36
032.0	000.3750	0118.0	015.5	163.0	100.0000	0295.7	078.4	62.29
033.0	000.3750	0117.8	015.5	162.8	100.0000	0295.7	078.6	62.22
034.0	000.3750	0117.7	015.5	162.7	100.0000	0295.7	078.8	62.15
035.0	000.3750	0117.5	015.5	162.6	100.0000	0295.7	079.0	62.08
036.0	000.3750	0117.4	015.5	162.5	100.0000	0295.7	079.3	62.01
037.0	000.3750	0117.3	015.5	162.4	100.0000	0295.7	079.5	61.93
038.0	000.3750	0117.1	015.5	162.3	100.0000	0295.7	079.7	61.86
039.0	000.3750	0117.0	015.5	162.2	100.0000	0295.7	080.0	61.78
040.0	000.3750	0116.8	015.5	162.1	100.0000	0295.7	080.2	61.70
041.0	000.3750	0116.7	015.5	162.0	100.0000	0295.7	080.4	61.63
042.0	000.3750	0116.6	015.4	161.9	100.0000	0295.7	080.7	61.55
043.0	000.3750	0116.4	015.4	161.8	100.0000	0295.7	080.9	61.47

				Figure 3-1							
044.0	000.3750	0116.3	015.4	161.7	100.0000	0295.7	081.1	61.39			
045.0	000.3750	0116.2	015.4	161.6	100.0000	0295.7	081.4	61.31			
046.0	000.3750	0115.9	015.4	161.6	100.0000	0295.7	081.6	61.23			
047.0	000.3750	0115.6	015.4	161.5	100.0000	0295.7	081.9	61.15			
048.0	000.3750	0115.4	015.4	161.4	100.0000	0295.7	082.1	61.07			
049.0	000.3750	0115.1	015.3	161.4	100.0000	0295.7	082.4	60.99			
050.0	000.3750	0114.8	015.3	161.3	100.0000	0295.7	082.6	60.90			

03-17-2011 Terrain Data

CIMX  
 (^ Max Class Parameters)  
 Channel = 204C1  
 Max ERP = 100 kW  
 RCAMSL = 483 M  
 N. Lat. 42 10 15.0  
 W. Lng. 82 59 29.0  
 Protected  
 54 dBu

WHRQ  
 Channel = 201A  
 Max ERP = 0.375 kW  
 RCAMSL = 300.8 M  
 N. Lat. 41 22 37.8  
 W. Lng. 82 48 52.3  
 Interfering  
 94 dBu

Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Azi muth (degrees)	ERP (kW)	HAAT (m)	Di st (km)	Actual (dBu)	I X (km)
111.0	100.0000	0292.5	086.0	048.5	000.3750	0115.2	087.2	28.50	
112.0	100.0000	0292.6	086.0	048.9	000.3750	0115.1	085.8	28.91	
113.0	100.0000	0292.7	086.0	049.4	000.3750	0115.0	084.4	29.28	
114.0	100.0000	0292.8	086.0	049.8	000.3750	0114.9	083.1	29.66	
115.0	100.0000	0293.0	086.0	050.3	000.3750	0114.8	081.7	30.04	
116.0	100.0000	0293.1	086.0	050.8	000.3750	0114.6	080.4	30.43	
117.0	100.0000	0293.2	086.0	051.2	000.3750	0114.5	079.0	30.81	
118.0	100.0000	0293.3	086.0	051.7	000.3750	0114.4	077.6	31.20	
119.0	100.0000	0293.5	086.0	052.1	000.3750	0114.3	076.3	31.60	
120.0	100.0000	0293.6	086.0	052.6	000.3750	0114.2	074.9	32.00	
121.0	100.0000	0293.7	086.0	053.0	000.3750	0114.1	073.5	32.40	
122.0	100.0000	0293.8	086.0	053.5	000.3750	0113.9	072.1	32.81	
123.0	100.0000	0293.9	086.0	053.9	000.3750	0113.8	070.7	33.23	
124.0	100.0000	0294.1	086.0	054.4	000.3750	0113.7	069.3	33.65	
125.0	100.0000	0294.2	086.0	054.8	000.3750	0113.6	067.9	34.08	
126.0	100.0000	0294.3	086.0	055.2	000.3750	0113.5	066.5	34.51	
127.0	100.0000	0294.4	086.0	055.7	000.3750	0113.4	065.1	34.95	
128.0	100.0000	0294.6	086.0	056.1	000.3750	0113.2	063.6	35.40	
129.0	100.0000	0294.7	086.0	056.5	000.3750	0113.1	062.2	35.87	
130.0	100.0000	0294.8	086.0	057.0	000.3750	0113.0	060.8	36.36	
131.0	100.0000	0294.9	086.0	057.4	000.3750	0112.9	059.3	36.87	
132.0	100.0000	0295.1	086.0	057.8	000.3750	0112.8	057.9	37.39	
133.0	100.0000	0295.2	086.0	058.2	000.3750	0112.7	056.5	37.93	
134.0	100.0000	0295.3	086.0	058.6	000.3750	0112.6	055.0	38.48	
135.0	100.0000	0295.4	086.0	059.0	000.3750	0112.5	053.6	39.04	
136.0	100.0000	0295.4	086.0	059.4	000.3750	0112.4	052.1	39.60	
137.0	100.0000	0295.4	086.0	059.8	000.3750	0112.3	050.6	40.16	
138.0	100.0000	0295.5	086.0	060.2	000.3750	0112.2	049.2	40.72	
139.0	100.0000	0295.5	086.0	060.6	000.3750	0112.1	047.7	41.28	
140.0	100.0000	0295.5	086.0	061.0	000.3750	0112.0	046.2	41.85	
141.0	100.0000	0295.5	086.0	061.3	000.3750	0111.9	044.8	42.43	
142.0	100.0000	0295.5	086.0	061.7	000.3750	0111.8	043.3	43.03	
143.0	100.0000	0295.5	086.0	062.0	000.3750	0111.7	041.8	43.64	
144.0	100.0000	0295.5	086.0	062.3	000.3750	0111.6	040.3	44.27	
145.0	100.0000	0295.5	086.0	062.7	000.3750	0111.5	038.8	44.91	
146.0	100.0000	0295.5	086.0	063.0	000.3750	0111.4	037.3	45.57	
147.0	100.0000	0295.6	086.0	063.2	000.3750	0111.4	035.8	46.25	
148.0	100.0000	0295.6	086.0	063.5	000.3750	0111.3	034.3	46.94	

Figure 3-1

149.0	100.0000	0295.6	086.0	063.7	000.3750	0111.2	032.9	47.66
150.0	100.0000	0295.6	086.0	064.0	000.3750	0111.2	031.4	48.40
151.0	100.0000	0295.6	086.0	064.2	000.3750	0111.1	029.9	49.21
152.0	100.0000	0295.6	086.0	064.3	000.3750	0111.1	028.4	50.09
153.0	100.0000	0295.6	086.0	064.4	000.3750	0111.1	026.9	51.04
154.0	100.0000	0295.6	086.0	064.5	000.3750	0111.0	025.4	52.05
155.0	100.0000	0295.6	086.0	064.5	000.3750	0111.0	023.9	53.12
156.0	100.0000	0295.7	086.0	064.5	000.3750	0111.0	022.4	54.24
157.0	100.0000	0295.7	086.0	064.3	000.3750	0111.1	020.9	55.39
158.0	100.0000	0295.7	086.0	064.1	000.3750	0111.1	019.4	56.59
159.0	100.0000	0295.7	086.0	063.7	000.3750	0111.2	017.9	57.81
160.0	100.0000	0295.7	086.0	063.2	000.3750	0111.4	016.4	59.06
161.0	100.0000	0295.7	086.0	062.5	000.3750	0111.6	014.9	60.22
162.0	100.0000	0295.7	086.0	061.5	000.3750	0111.8	013.4	62.01
163.0	100.0000	0295.7	086.0	060.2	000.3750	0112.2	011.9	64.11
164.0	100.0000	0295.8	086.0	058.3	000.3750	0112.7	010.5	66.50
165.0	100.0000	0295.8	086.0	055.7	000.3750	0113.4	009.0	69.16
166.0	100.0000	0295.8	086.0	051.9	000.3750	0114.4	007.6	72.12
167.0	100.0000	0295.8	086.0	046.2	000.3750	0115.8	006.3	75.72
168.0	100.0000	0295.8	086.0	037.4	000.3750	0117.2	005.1	79.48
169.0	100.0000	0295.8	086.0	023.4	000.3750	0119.1	004.1	83.08
170.0	100.0000	0295.8	086.0	002.4	000.3750	0122.0	003.5	85.71
171.0	100.0000	0295.8	086.0	337.4	000.3750	0122.9	003.5	85.68
172.0	100.0000	0295.8	086.0	316.7	000.3750	0123.5	004.1	83.14
173.0	100.0000	0295.9	086.0	303.0	000.3750	0121.1	005.1	79.54
174.0	100.0000	0295.9	086.0	294.4	000.3750	0119.3	006.4	75.77
175.0	100.0000	0295.9	086.0	288.8	000.3750	0118.1	007.7	72.23
176.0	100.0000	0295.9	086.0	285.1	000.3750	0117.4	009.1	69.32
177.0	100.0000	0295.9	086.0	282.5	000.3750	0116.8	010.5	66.67
178.0	100.0000	0295.9	086.0	280.6	000.3750	0116.4	012.0	64.31
179.0	100.0000	0295.9	086.0	279.3	000.3750	0116.2	013.5	62.24
180.0	100.0000	0295.9	086.0	278.3	000.3750	0116.0	014.9	60.47
181.0	100.0000	0296.1	086.0	277.6	000.3750	0115.8	016.4	59.33
182.0	100.0000	0296.2	086.0	277.1	000.3750	0115.7	017.9	58.09
183.0	100.0000	0296.4	086.0	276.8	000.3750	0115.7	019.4	56.87
184.0	100.0000	0296.5	086.0	276.6	000.3750	0115.6	020.9	55.69
185.0	100.0000	0296.7	086.0	276.4	000.3750	0115.6	022.4	54.53
186.0	100.0000	0296.8	086.0	276.4	000.3750	0115.6	023.9	53.42
187.0	100.0000	0297.0	086.0	276.4	000.3750	0115.6	025.4	52.36
188.0	100.0000	0297.1	086.0	276.5	000.3750	0115.6	026.9	51.35
189.0	100.0000	0297.3	086.0	276.6	000.3750	0115.6	028.4	50.40
190.0	100.0000	0297.4	086.0	276.8	000.3750	0115.6	029.9	49.51
191.0	100.0000	0297.6	086.0	277.0	000.3750	0115.7	031.4	48.70
192.0	100.0000	0297.7	086.0	277.2	000.3750	0115.7	032.9	47.96
193.0	100.0000	0297.9	086.0	277.4	000.3750	0115.8	034.4	47.25
194.0	100.0000	0298.0	086.0	277.7	000.3750	0115.8	035.9	46.55
195.0	100.0000	0298.2	086.0	278.0	000.3750	0115.9	037.4	45.86
196.0	100.0000	0298.3	086.0	278.3	000.3750	0116.0	038.9	45.20
197.0	100.0000	0298.5	086.0	278.6	000.3750	0116.0	040.4	44.55
198.0	100.0000	0298.6	086.0	278.9	000.3750	0116.1	041.8	43.91
199.0	100.0000	0298.8	086.0	279.3	000.3750	0116.2	043.3	43.30
200.0	100.0000	0298.9	086.0	279.6	000.3750	0116.2	044.8	42.69
201.0	100.0000	0299.1	086.0	280.0	000.3750	0116.3	046.3	42.11
202.0	100.0000	0299.2	086.0	280.4	000.3750	0116.4	047.7	41.53
203.0	100.0000	0299.4	086.0	280.7	000.3750	0116.5	049.2	40.97
204.0	100.0000	0299.5	086.0	281.1	000.3750	0116.5	050.7	40.40
205.0	100.0000	0299.7	086.0	281.5	000.3750	0116.6	052.1	39.84
206.0	100.0000	0299.8	086.0	281.9	000.3750	0116.7	053.6	39.28
207.0	100.0000	0299.9	086.0	282.3	000.3750	0116.8	055.0	38.72
208.0	100.0000	0300.1	086.0	282.7	000.3750	0116.9	056.5	38.17
209.0	100.0000	0300.2	086.0	283.2	000.3750	0117.0	057.9	37.62
210.0	100.0000	0300.4	086.0	283.6	000.3750	0117.1	059.4	37.10
211.0	100.0000	0300.5	086.0	284.0	000.3750	0117.1	060.8	36.59
212.0	100.0000	0300.7	086.0	284.4	000.3750	0117.2	062.2	36.09
213.0	100.0000	0300.8	086.0	284.9	000.3750	0117.3	063.7	35.62

Figure 3-1

214.0	100.0000	0301.0	086.0	285.3	000.3750	0117.4	065.1	35.17
215.0	100.0000	0301.1	086.0	285.7	000.3750	0117.5	066.5	34.72
216.0	100.0000	0301.3	086.0	286.2	000.3750	0117.6	067.9	34.29
217.0	100.0000	0301.4	086.0	286.6	000.3750	0117.7	069.3	33.86
218.0	100.0000	0301.6	086.0	287.1	000.3750	0117.8	070.7	33.43
219.0	100.0000	0301.7	086.0	287.5	000.3750	0117.9	072.1	33.01
220.0	100.0000	0301.9	086.0	288.0	000.3750	0118.0	073.5	32.60
221.0	100.0000	0302.0	086.0	288.4	000.3750	0118.1	074.9	32.19
222.0	100.0000	0302.2	086.0	288.9	000.3750	0118.1	076.3	31.79
223.0	100.0000	0302.3	086.0	289.3	000.3750	0118.2	077.6	31.39
224.0	100.0000	0302.5	086.0	289.8	000.3750	0118.3	079.0	31.00
225.0	100.0000	0302.6	086.0	290.3	000.3750	0118.4	080.4	30.61
226.0	100.0000	0302.7	086.0	290.7	000.3750	0118.5	081.7	30.22
227.0	100.0000	0302.8	086.0	291.2	000.3750	0118.6	083.1	29.83
228.0	100.0000	0302.9	086.0	291.6	000.3750	0118.7	084.4	29.45
229.0	100.0000	0303.0	086.0	292.1	000.3750	0118.8	085.7	29.08
230.0	100.0000	0303.0	086.0	292.6	000.3750	0118.9	087.1	28.70

## Community Coverage

Coverage Study - NED 30 Meter  
03-17-2011

WHRQ CH201 A , 0.375 kW, 102.4M HAAT, 300.8M COR AMSL  
Service Contour = 60 dBu. Population = 61,139

